UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/500,356	02/07/2000	Tetsujiro Kondo	450100-02329	2482

20999 7590 12/12/2003	EXAMINER
FROMMER LAWRENCE & HAUG	MARIAM, DANIEL G
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	ART UNIT	PAPER NUMBER
NEW YORK, NY 10151	2621	

DATE MAILED: 12/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _08 August 2003_.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-19_ is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-19_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All b)☐ Some * c)☐ None of:

  1.☐ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

  a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

Response to Amendment

1.   In response to the Office Action mailed on May 8, 2003 applicants have submitted an

amendment filed on August 8, 2003, amending claims 1 and 19, and arguing to traverse the

rejection of pending claims 1-19.

Response to Arguments

2.   Applicant's arguments with respect to independent claims 1 and 19 (and 2-18) have been

considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Inoue, et al.

(6,128,407).

With regard to claim 1, Toyoda discloses extraction means, i.e., cluster preparation

means, for extracting from the input data, i.e., color image data, similar input data having a

value, i.e., pixel value, close to a value of given input data, i.e., color pixels of the color image

data, included in the input data, and processing means, i.e., cluster preparator, for processing the

input data according to the similar input data extracted by said extraction means (See for

example, col. 11, lines 24-47).

Claim 19 is rejected the same as claim 1 except claim 19 is a method claim. Thus,

argument similar to that presented above for claim 1 is equally applicable to claim 19.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   Claims 2-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue, et al.

(6,128,407) in view of Li, et al. (5,602,934).

With regard to claim 2, Inoue, et al. (hereinafter "Inoue") discloses all of the claimed

subject matter, as already discussed above in paragraph 4, and the arguments are not repeated

herein, but are incorporated by reference. Inoue does not explicitly call for wherein said

extraction means extracts the similar input data by applying a weight to the input data according

to a difference between the input data and the given input data. However, Li, et al. (col. 7, lines

22-50) teaches this feature. Therefore, it would have been obvious to one having ordinary skill

in the art to incorporate the teaching as taught by Li, et al into the system of Inoue, if for no other

reason than to add a weight to the color image data, and to do so would at least improve the

extraction process of the area where the similar color pixel data exists.

With regard to claim 3, a data processing apparatus according to claim 2, wherein said

extraction means applies a weight to the input data by multiplying the input data with a

predetermined weight function (See for example, col. 7, lines 43 –60 Li, et al).

With regard to claim 4, a data processing apparatus according to claim 3, further comprising setting means for adaptively setting the weight function (See for example, col. 8, lines 46-52; and item 28, in Fig. 1 Li, et al).

With regard to claim 5, a data processing apparatus according to claim 4, further comprising estimation means for estimating a level of noise contained in the input data, wherein said setting means sets the weight function according to the estimated level of noise (which reads on col. 8, lines 49-52 Li, et al), for example.

With regard to claim 6, a data processing apparatus according to claim 1, wherein said processing means calculates the output data by adding the similar input data which are weighted according to temporal or spatial proximity between the similar input data and the given input data (See for example, col. 7, lines 36-53 Li, et al).

With regard to claim 7, a data processing apparatus according to claim 6, wherein said processing means applies a weight to the similar input data by multiplying the similar input data with a predetermined weight function (See for example, col. 7, lines 43 –60 Li, et al).

With regard to claim 8, a data processing apparatus according to claim 7, further comprising setting means for adaptively setting the weight function (See for example, col. 8, lines 46-52; and item 28, in Fig. 1 Li, et al).

With regard to claim 9, a data processing apparatus according to claim 8, further comprising estimation means for estimating a level of noise contained in the input data, wherein said setting means sets the weight function according to the estimated level of noise (which reads on col. 8, lines 49-52 Li, et al), for example.

With regard to claim 10, a data processing apparatus according to claim 1, wherein said extraction means extracts the similar input data from the input data based on a difference between the input data and the given input data (See for example, item 506, in Fig. 5 Li, et al).

With regard to claim 11, a data processing apparatus according to claim 1, wherein said extraction means extracts input data which is temporally or spatially close to the given input data as the similar input data (See for example, col. 7, lines 36-53 Li, et al).

With regard to claim 12, a data processing apparatus according to claim 1, wherein said extraction means extracts input data, as the similar input data, whose difference from the given input data is within a predetermined value (See for example, col. 7, lines 54-58 Li, et al).

With regard to claim 13, a data processing apparatus according to claim 12, further comprising setting means for adaptively setting the predetermined value (See for example, col. 8, lines 46-52; and item 28, in Fig. 1 Li, et al).

With regard to claim 14, a data processing apparatus according to claim 13, further comprising estimation means for estimating a level of noise contained in the input data, wherein said setting means sets the predetermined value according to the estimated level of noise (which reads on col. 8, lines 49-52 Li, et al), for example.

With regard to claim 15, a data processing apparatus according to claim 14, wherein said estimation means estimates the level of noise based on a difference between the input data and the corresponding output data or based on a variance of the input data (See for example, items 506-518, in Fig. 5 Li, et al).

With regard to claim 16, a data processing apparatus according to claim 1, wherein said processing means calculates the output data by performing approximate processing using the similar input data (See for example, col. 7, lines 12-35 Li, et al).

With regard to claim 17, a data processing apparatus according to claim 16, wherein said processing means performs the approximate processing according to a predetermined model, i.e., given image or original image (See for example, col. 7, lines 23-29 Li, et al).

With regard to claim 18, a data processing apparatus according to claim 17, wherein said processing means performs the approximate processing according to a model represented by a linear expression (col. 9, lines 9-12 Li, et al).

Conclusion

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to DANIEL G MARIAM whose telephone number is 703-305-

4010. The examiner can normally be reached on M-F (7:00-4:30) FIRST FRIDAY OFF.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, LEO BOUDREAU can be reached on 703-305-4607. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

        Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-306-0377.

DANIEL MARIAM
PRIMARY EXAMINER

December 5, 2003